

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**



Attorney Docket No. 1948/US/2  
Express Mail No. EV 304 884 764 US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Application of

Inventor: John R. KLUG

Confirmation No.: Not Yet Assigned

Application No.: 10/673,107

Examiner: Not Yet Assigned

Filed: September 27, 2003

Group Art Unit: Not Yet Assigned

Title: METHOD AND APPARATUS FOR  
IDENTIFYING, MANAGING, AND  
CONTROLLING COMMUNICATIONS

Mail Stop Petitions  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**PETITION TO MAKE SPECIAL UNDER 37 CFR 1.102**

Sir:

In accordance with 37 CFR 1.102, the Applicant hereby petitions to make the above-referenced application special.

**I. Patentability**

In support of this Petition, the Applicant states that a pre-examination patentability search has been made in the records of the United States Patent and Trademark Office. Class 709, subclasses 2206 and 207 were searched. The most relevant references discovered by the search are summarized below, and copies of these references are enclosed. Each summary includes a concise explanation of the references and discussion of differences between the references and subject matter claimed in the instant application. The Applicant respectfully submits these discussions of differences satisfy the requirements of 37 CFR 1.111 (b) and (c).

11/14/2003 HUUONG1 00000125 10673107

01 FC:1460

130.00 OP

United States Patent No. 5,999,967

This reference discloses a method and apparatus for filtering electronic mail. The mail recipient may filter, accept, or reject the electronic mail based on an associated electronic stamp. A sender module may create an electronic stamp, encrypt it, and attach it to an electronic mail. A receiver module may receive the electronic mail and attached stamp, decrypt the stamp, and process the electronic mail.

The Applicant respectfully submits this reference fails to disclose an apparatus for generating a frank, comprising a franking request receipt module, a franking generation module, and a frank transmission module. Specifically, the Applicant respectfully submits this reference does not disclose (at a minimum) any franking request receipt module or frank transmission module, as claimed.

Further, the Applicant respectfully submits this reference does not disclose an apparatus for generating and sending a franked communication, comprising a frank request module, a frank attachment module, and a franked communication transmission module. Specifically, the Applicant respectfully submits this reference does not disclose (at a minimum) any frank request module, as claimed.

Finally, the Applicant respectfully submits the reference fails to disclose an apparatus for receiving and processing a franked communication, comprising a communication receipt module, a determination module operative to determine in a communication is franked, and a franked communication processing module operative to process the communication according to a first rule if the communication is franked. Specifically, the Applicant respectfully submits this reference does not disclose (at a minimum) a determination module, as claimed.

United States Patent Application No. 2002/0052855

This reference discloses an e-mail reduction/elimination system wherein “potential recipients grant others the right to send the users e-mails on the condition that any sender of an e-mail pays a fee in the event that the recipient considers the e-mail to be unwanted intrusion” (paragraph 41). This system is implemented by receiving a sender’s e-mail at an intermediate e-mail inbox, receiving a deposit (or authorization for a deposit) at the intermediary e-mail inbox,

and forwarding the sender e-mail to a second e-mail inbox only if the deposit exceeds a threshold.

The Applicant respectfully submits this reference fails to disclose or suggest a frank, or any applications for a frank, such as an apparatus for generating a frank, an apparatus for generating and sending a franked communication, or an apparatus for receiving and processing a franked communication.

United States Patent Application No. 2001/0023432

This reference discloses a method enabling a fee to be charged to a party initiating an electronic mail communication when the party is not on an authorized list. An e-mail recipient may implement an authorized list of e-mail source addresses. If source address for an e-mail is not present on this list, the invention either automatically bills the source's Internet service provider or requests authorization to bill from the source.

The Applicant respectfully submits this reference fails to disclose or suggest a frank, or any applications for a frank, such as an apparatus for generating a frank, an apparatus for generating and sending a franked communication, or an apparatus for receiving and processing a franked communication.

United States Patent No. 5,930,479

This reference discloses a communications addressing system permitting transmission and receipt of authorized messages across a network. The system employs a channelized address to transmit messages.

In one embodiment, an introductory channel may be used to transmit an electronic money payment. If no such payment is made, the system may automatically refuse reading of the message on a recipient's behalf. The payment amount may be set by the recipient, and the payment may be retained by the recipient.

The Applicant respectfully submits this reference fails to disclose or suggest a frank, or any applications for a frank, such as an apparatus for generating a frank, an apparatus for generating and sending a franked communication, or an apparatus for receiving and processing a franked communication.

United States Patent No. 6,266,692

This reference discloses a method for filtering or blocking electronic mails. An incoming electronic mail is analyzed to determine whether their headers contain a valid passcode. If so, the e-mail is sent to the receiver. If the header has no passcode, the e-mail is held, and the receiver may reject or accept the e-mail.

The Applicant respectfully submits this reference fails to disclose or suggest a frank, or any applications for a frank, such as an apparatus for generating a frank, an apparatus for generating and sending a franked communication, or an apparatus for receiving and processing a franked communication.

United States Patent Application Serial No. 2002/0087641

This reference discloses an e-mail control system and method permitting a user to create an alias e-mail address, receive e-mail at the alias address, and forward e-mail from the alias address to a user's actual e-mail address. The user may configure multiple alias addresses.

The Applicant respectfully submits this reference fails to disclose or suggest a frank, or any applications for a frank, such as an apparatus for generating a frank, an apparatus for generating and sending a franked communication, or an apparatus for receiving and processing a franked communication.

United States Patent No. 6,330,590

This reference discloses a system for identifying and eliminating bulk electronic messages. The system monitors live e-mail messages flow streams through a network, eliminating certain portions of messages, and comparing the remaining text portions of messages

against one another. Where at least two messages match, a 16-bit code may be generated for that message, and used to identify other copies of the e-mail message sent through the network.

The Applicant respectfully submits this reference fails to disclose or suggest a frank, or any applications for a frank, such as an apparatus for generating a frank, an apparatus for generating and sending a franked communication, or an apparatus for receiving and processing a franked communication.

United States Patent No. 2002/0016824

This reference discloses a method and system for analyzing electronic mail messages, calculating a confidence factor for each message, and using the confidence factor to determine whether the message is a bulk or junk mailing. Identified junk e-mail may be stored or deleted.

The Applicant respectfully submits this reference fails to disclose or suggest a frank, or any applications for a frank, such as an apparatus for generating a frank, an apparatus for generating and sending a franked communication, or an apparatus for receiving and processing a franked communication.

United States Patent No. 6,421,709

This reference discloses a system and method of filtering junk electronic mails. A user may create a first filter containing e-mail addresses corresponding to junk e-mail senders, and a second filter containing e-mail addresses corresponding to approved e-mail senders. Incoming e-mails are matched against these filters; e-mails from junk e-mail senders are deleted, while e-mails from approved senders are transmitted to a user's inbox. E-mails from senders on neither list are held in a storage area.

The Applicant respectfully submits this reference fails to disclose or suggest a frank, or any applications for a frank, such as an apparatus for generating a frank, an apparatus for generating and sending a franked communication, or an apparatus for receiving and processing a franked communication.

United States Patent Application Serial No. 2002/0059385

This reference discloses a method and system for filtering electronic messages based on a “trustlist” or a “trustweb.” A sender may transmit messages to a recipient through the trustweb site, necessitating a visit to a specific web site, or may transmit an e-mail containing a unique code specified by the recipient. When the sender’s e-mail is received and has met one of these two requirements, the sender’s address is added to a recipient’s trustlist. Once the sender’s address is present in the trustlist, the sender may transmit e-mail to the recipient by any normal means.

The Applicant respectfully submits this reference fails to disclose or suggest a frank, or any applications for a frank, such as an apparatus for generating a frank, an apparatus for generating and sending a franked communication, or an apparatus for receiving and processing a franked communication.

For at least the reasons discussed above, none of these references appear to anticipate or render obvious independent claims 1, 7, or 13. Claims 2-6 depend from and include all the limitations of claim 1. Claims 8-12 depend from and include all the limitations of claim 7. Claims 14-20 depend from and include all the limitations of claim 13. Accordingly, these claims are also patentable over the listed references. Further, each of claims 1-20 may be patentable over these references for additional reasons not discussed herein.

No additional references were disclosed by the patentability search.

## II. Economic Impact

Additionally, the Applicant respectfully submits the invention disclosed and claimed in the above-referenced application addresses a problem of national scope and importance. The impact of junk e-mailings on national productivity and economy is well-documented, and results in literally billions of dollars in annual costs. In addition to the economic costs, private users of

e-mail spend countless hours each year sorting and deleting junk e-mail. Several articles documenting the costs of junk e-mailings are attached as Exhibits A-C.

Further, the Applicant respectfully notes that Congress has recently introduced legislation to address the national epidemic of unsolicited e-mailings. This legislation has been approved by the Senate, and will shortly be voted on by the House of Representatives. The Applicant submits an October 30, 2003 news article from Yahoo! News detailing legislative efforts as Exhibit D.

Finally, the Applicant respectfully submit that many viruses are distributed through electronic mail. These viruses also cause untold economic damage by crippling business, government, and private computer systems. Blocking or limiting junk e-mail may reduce the spread (and thus the economic impact) of such viruses. A copy of an article detailing the effects of virus-laden electronic mailings is attached hereto as Exhibit E.

Accordingly, the Applicant respectfully submits that the unprecedented impact, both in economic and productivity terms, of junk e-mail on society renders the instant application of sufficient import to accord special examination status. The Applicant respectfully requests this application be taken out of turn for examination, both due to the likely patentability of the subject matter and the economic import of the application.

### III. Conclusion

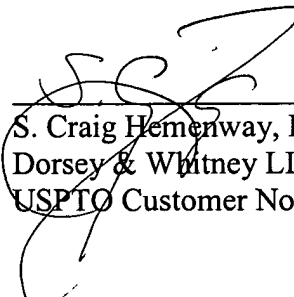
This Petition is filed with a check in the amount of \$130.00, in accordance with 37 CFR 1.17(h). Should any additional fees be necessary, please consider this authorization to charge Deposit Account No. 04-1415 as necessary.

The Applicant thanks the Examiner for the thorough review of the cited references and claims in this application, and consideration of this Petition. Further, the Applicant submits that a showing of special status has been made. In the event the Examiner has questions or comments and a telephone conversation would expedite a resolution, the Applicant invites the Examiner to contact the undersigned attorney at (303) 620-3400.



Dated this 10<sup>TH</sup> day of NOVEMBER, 2003

Respectfully submitted:



---

S. Craig Hemenway, Reg. No. 44,759  
Dorsey & Whitney LLP  
USPTO Customer No. 20686

SCH/sd

# BUSINESS

File: +1 spam  
e-mail spam

Monday, July 22, 2002

www.denverpost.com/business

THE DENVER POST / Section C



Lane Rowland, president of LDR Solutions, says software assumes e-mail from someone not in the company's consumer-targeted CannedSpam recipient's address book is spam.

The Denver Post / Helen H. Richardson

## State tourism sees decline



## Companies work to cut spam e-mail

### Screening programs protect productivity

By Vauhini Vara

Special to The Denver Post

The spam epidemic has grown 450 percent in the past year, and those on the receiving end are the ones paying — about \$12.1 billion a year, according to one study.

Spam attacks totaled 4.8 million in June, compared with last June's total of less than a million, according to a study by Brightmail, a San Francisco-based software company. And a European Union study commissioned last February found that spam costs e-mail users billions of dollars yearly.

"We get spam all the way from mortgage rate advertisements to pornographic information," said

Jeff Neiswanger, president of Idaho-based Tele-Servicing Innovations, a call center. "We've got a lot of (employees) that conduct business through e-mails, chatting back and forth and transferring data. It's getting bad."

The deluge has corporations demanding anti-spam software and services in greater numbers, said Marcel Nienhuis, an analyst with the Radicati Group, a consulting and market research firm based in Palo Alto, Calif.

The cry could result in double the revenues — to \$180 million and \$1.2 billion — for anti-spam and content-filtering products by 2006, a Radicati Group study found.

Even Internet service providers have been forced to respond to consumer complaints about spam. Microsoft, for example, plans to debut an advanced filtering system in a new version of its Internet service, MSN, in October.

"While consumers don't seem to care as much, what you'll find (in corporations) is that there is very little tolerance," said Scott Chasin, who founded content-filtering company MX Logic in Denver three months ago.

Assuming that an employee receives 60 spam messages each week, and that it takes three seconds to delete each message, that's 180 seconds, or three minutes, per week. Please see SPAM on 4C

# Companies canning disruptive spam e-mail

SPAM from Page 1C

onds to review and delete a junk e-mail, each user spends two hours and 36 minutes annually deleting spam, Chasin said. With an annual salary of \$55,000 per worker, the cost of dealing with spam for a 5,000-employee company amounts to almost \$344,000 each year.

Joe Sperrazza, a Golden resident, works as director of outsourcing for Computer Sciences Corp., which does not use filtering programs.

"They don't block anything because they don't want a situation in which a client message doesn't go through," Sperrazza said. As a result, he said, he receives unsolicited e-mails with ambiguous subject lines such as "Thank you for joining" or "Here is that link" that he needs to delete each morning.

"Sometimes it can be terrible," he said.

For some, it's worse. Elizabeth Crakes, a Web designer, encodes her e-mail address "to foil the e-mail harvester bots," she said. But she said she still receives up to 100 credit card, Viagra and pornography offers each day. "I've had to give up my favorite e-mail address," she said.

So far, Crakes said, she hasn't resorted to using anti-spam software, but several local companies are developing programs for those ready to stem the tide.

LDR Solutions, based in Black Forest, has launched CannedSpam, a program targeted toward private e-mail users like Crakes. CannedSpam blocks all senders not listed in the customer's address book.

"Basically, it makes the assumption that if an e-mail comes to you from somebody not in your address book, it is most likely spam," said Lane Rowland, LDR president.

But for corporate users, that assumption may be untrue.

Unlike LDR, MX Logic acts as a gateway, scouring messages for questionable content before they reach the company. MX Logic filters spam by screening e-mails for unconventional formatting, including misleading or fake headers, and by checking for suspicious characters — the word Viagra, for example, or a series of exclamation points.

The result: a 98 percent effective screening method, Chasin claims.

MX Logic serves companies ranging from a 7,000-employee bank to a 70-person real estate firm. "Spam knows no boundaries," Chasin said. "It's a pain that any enterprise, big or small, is feeling today."

Neiswanger, president of the Idaho call center, was one of MX Logic's first clients. He estimated that he has noticed a 95 percent decrease in junk e-mail since hiring the company.

Though MX Logic filters for viruses and "foul content," Neiswanger said his company uses it primarily to screen spam.

"If we've got people sorting through their e-mail in a nonproductive manner, having to delete spam stuff, I'd rather pay money to get rid of that in an efficient manner," he said. "It's pretty cost-effective when you factor in the time involved in lost productivity."

today. Bakeries across Israel sent workers home Sunday because they had no flour with which to bake. Others bought flour off the black market at inflated prices.

bakeries," said Angel. "It was closed during the war of Independence, during the '67 war, nor during the War of Yom Kippur, and it is hurting my business badly."

## Get Certified



There Are Still IT Jobs Out There For Skilled And Certified People...

Are You One Of Them?

A+

Net+

MCSA

MCSE

MCSD

MCDBA

MCAD

CNA

CNE

CIW

CCNA

CCNP

SCNP

& More!

If not, find out which certifications are right for you and how to earn the skills you need.

### FREE IT Career Seminars

August 15th

11:30am-1:00pm

Downtown Denver

August 22nd

6:30pm-8:00pm

DTC Location

**R.S.V.P. 303-745-0100**

**RSVP Today Or Call For A FREE Career Consultation!**

**New Horizons**  
Computer Learning Centers

Days, Evening & Weekends  
Free Career Counseling  
College Credit Available  
Customized Scheduling  
Certified Trainers

Retake Classes For Free  
Authorized Training Center  
Financing Available  
Online Training Available  
Job Placement Assistance

Broomfield ~ Colorado Springs ~ DTC ~ Downtown Denver ~ Loveland  
303-745-0100 970-461-0300 719-380-0300  
www.nhcolorado.com

Approved & Regulated by the Colorado Division of Private Occupational Schools.

## AOL softens its ad pitch to revive lagging sales

By Paul Davidson  
USA Today

America Online executives say they have softened their bare-knuckled dealings with advertisers and are taking other steps to revive an ad engine that fueled revenue growth in the late '90s.

The service's sputtering ad sales have weighed down AOL Time Warner's share price. And they played a role last week in the exit of the titan's chief operating officer, Robert Pittman, who came from AOL, and the elevation of Time Warner veterans Don Logan and Jeff Bewkes to split No. 2 du-

down from \$2.7 billion in 2001.

Advertising also was at the center of a Washington Post report last week that said AOL propped up revenue by \$270 million in 2000 and 2001 with creative accounting and ad scheduling.

AOL says the accounting was proper and the deals accounted for less than 5 percent of ad revenue. Robert Sherman, president of AOL Interactive Marketing, says AOL has adopted a gentler style. It was known for strong-arming dot-com advertisers into pricey deals. That alienated clients and may have hurt sales. "They kind of rammed

## CONTACT BASED SELLING

**A ROI Based Selling Program Guaranteed Results\***  
3 proven training programs to fit any organization:

- 1. On-Line Hell Week-5 days-A Results Based Training Week**
  - 5 days of training
  - 15 hours of cold calling
  - Access to 40 hours of training modules
  - Development of client needs and analysis
  - Development of effective calling scripts
  - Development of top objectives & best answers
  - Certification in Contact Based Selling
- 2. One Day Seminar (8am-4pm)**
  - Access to 40 training modules
  - 5 Contract Partners Special reports
  - Monthly newsletter - 12 months
- 3. On-line Modules - 12 months**
  - Sign up and increase sales today!

**Join Us For Our FREE Info Seminar**  
**Wednesday, July 24 11am - 1pm**

**USA TODAY**
**Marketplace**
[Cars](#) • [Jobs](#) • [Travel](#) • [Business Opportunities](#) • [Franchise](#) • [Real Estate](#) • [Tickets](#) • [More](#)
[Home](#)  
[News](#)  
[Money](#)  
[Sports](#)  
[Life](#)  
[Tech](#)
**Main Categories**
[Tech briefs](#)
[Web Guide](#)
[Tech Investor](#)
[Product reviews](#)
**More Tech**
[Columnists](#)
[Shareware Shelf](#)
[Talk Today](#)
[Weather](#)
 Search

 Powered by [Google](#) 
[Advanced Search](#)
**ARCHIVES**  
 SEARCH FOR  
 NEWSPAPER ARTICLES  
[CLICK HERE](#)
**NEW E-MAIL**  
 **GET NEWS  
IN YOUR INBOX**  
[Click here to get the  
Daily Briefing in your  
inbox](#)

# Tech


[E-MAIL THIS](#) • [PRINT THIS](#) • [SAVE THIS](#) • [MOST POPULAR](#) • [SUBSCRIBE](#)

Posted 8/11/2003 12:22 AM Updated 8/11/2003 1:15 PM

## Spam fighters win battles, but the war rages on

By Jon Swartz, USA TODAY

At 5-foot-10 and slightly built, Terry Fox, 51, won't be mistaken for a Green Beret or an intelligence operative.

But Fox is on the front lines of Corporate America's escalating war against spam.

He has deployed an arsenal of high-tech weapons, such as network gateways and software filters, to stanch junk e-mail at MasterCard International, where he is, some jokingly suggest, chief spam officer.

The title sounds silly, but the job is not.

"We were getting killed by this stuff," says a flustered Lowell Mattox, vice president of internal technology at MasterCard in St. Louis.

Spam busters like Fox at companies large and small are trying anything and everything to curb it. They're spending hundreds of thousands of dollars on anti-spam technology, such as software filters and network firewalls. They're enlisting employees to flag spam vs. regular e-mail, and they're urging them not to sign up or buy anything promoted in a spam. They're also suing spammers.

But while drastic actions help, battling spam is neither easy or hassle-free. Filtering software, while reducing spam, can block or delay important business messages if its settings are too aggressive, spam experts say.

Tech troubleshooters must also must weigh the impact on employees and customers when eradicating spam. An overzealous approach could slow communication and hamper productivity.

"It's an administrative nightmare that has, overnight, become the biggest (information technology) problem," says Wayne Neville, network analyst at floor company Congoleum. "If you ignore it, it overwhelms e-mail. But if you attack it too aggressively, you lose legitimate messages and upset employees."

That is a recurring theme at corporations, where spam is draining budgets and posing a threat to e-mail as a communications and productivity tool. Spam will cost U.S. companies \$10 billion this year in lost productivity, new equipment, software and manpower, says Ferris Research. This year, half of all external corporate e-mail — or



### Today's Top Tech Stories

- [Discount Internet access: industry giants shrink](#) - 8:49 AM
- [Justice Scalia goes for telecomunications sun](#)
- [QuakeCon 2003 joins vi](#) - 8:49 AM
- [Fake drugs force maker games](#) - 3:55 AM
- [Wall Street powers into](#) - 1:53 AM

### E-Mail Newsletters

Sign up to receive our free **newsletter** and get the latest Hot Sites & more in your inbox

 E-mail: 

 Select one: ☐

more than 2 trillion messages — will be spam, compared with a third last year, market researcher IDC says.

The lines of defense, in order of use, are:

- **Software filters.** A flood of software products, many of them new, offer different techniques to weed out unwanted e-mail.

Some companies create software blacklists that eliminate messages originating from a list of spam addresses. Others require those sending an e-mail to send it twice to prove that the e-mails are not just being generated en masse by a computer.

The software used by the University of California-Berkeley calculates the probability a message is spam. The system searches for phrases such as "buy now" and for big, bold text usually associated with spam. The higher the figure assigned to a message, the more likely it is spam.

MasterCard lets employees say what is spam. A button on each e-mail account gives users the option of forwarding suspicious messages to a quarantine folder on the company's network.

Since launching an anti-spam program late last year, MasterCard has spent \$175,000 — \$110,000 on filtering software and \$65,000 on annual license and maintenance fees. Technical staff costs for the treatment of spam are \$50,000 to \$75,000 a year, the company says.

Initial results were encouraging: 54% of MasterCard's external e-mail in July, or more than 815,000 messages, were blocked as spam. But MasterCard is finding it a never-ending, time-consuming battle.

"There's a growing sense of frustration despite our gains," Fox says. "We have to constantly tweak the network to counteract different spam techniques."

- **Outsourcing.** Bollinger Shipyards, which has about 325 e-mail users, has opted to pay about \$600 a month to deal with spam. The Lockport, La.-based shipbuilder hired Sprint to screen e-mails before they even get to the company network. That blocks 8,800 junk messages daily — a staggering 88% of all external e-mail. "We went from an out-of-control situation to a tolerant one," says Jay Joseph, tech director.

- **Training.** Employees are more often being put on the front lines.

Restaurant chain Red Robin Gourmet Burgers, where one former tech employee received 5,500 spam messages in four months, urges workers not to respond to spam. If they sign up for something on a Web site and are asked to give their e-mail address, Red Robin suggests they make up a fake one.

Other employers encourage the use of free e-mail service from the likes of Hotmail and Yahoo for personal use. When an address draws too much spam, users are advised to dump it for a new one.

Getting employees to participate can be tough, employers say. "That requires extra work, and most people don't like extra work," says Brion Moss, a technology administrator at the University of California-Berkeley. Then, too, companies have difficulty defining spam, and involving employees usually makes that tougher.

"Marketing and sales (employees) might consider messages as prospects and business leads, but engineering (employees) might just want e-mail from family and friends," says J.F. Sullivan, a product manager at anti-spam company Sendmail.

•**Anti-spam SWAT teams.** When Howard Jenkins, CIO of Red Robin, and other executives were bombarded with adult-oriented ads and other commercial pitches this year, he ordered a crackdown on spam. Jenkins chose Adam Catbagan, 25, a self-proclaimed "e-mail god" with six years of filtering experience, to head a three-person team.

MasterCard's Fox, too, spent most of the past 20 years fighting computer viruses before he was appointed to anti-spam duties in late 2002. No wonder. Spam has gotten so bad, it's surpassed viruses and hackers as the top priority among tech professionals through 2004, says market researcher Radicati Group. Fox heads an 11-person team of e-mail and messaging experts at the 5,500-employee company.

•**Lawsuits.** Though lawsuits are rarely pursued because spammers are difficult to find and cases typically take a year or more to go to trial, some corporations are going to court.

United Parcel Service filed a lawsuit June 11 in federal court in Atlanta against spammers who allegedly used UPS' e-mail address to send messages promoting adult material to UPS customers. The delivery company is suing under federal and state laws that bar computer fraud and racketeering, spokesman Norman Black says.

"This is the most effective way to put an end to this," Black says. "Somebody is using our name to hawk repugnant products to customers."

#### **If at first ...**

If only anti-spam products, e-mail tips and lawsuits were enough. Without strong federal laws and with hordes of bulk e-mailers finding new ways to crack in-boxes, it may take years to stunt spam's growth, experts say.

Some companies are even reluctant to install anti-spam technology out of fear it will block legitimate e-mail and anger employees.

Fears are warranted. Investment managers at financial services firm The Vanguard Group recently thought e-mail service was down because a restrictive filter stopped messages containing research and business correspondence.

"It's the important e-mail that you miss that causes more problems than a bunch of junk in your mailbox," says Steve Baloff, 48, a Silicon Valley venture capitalist.

A few weeks ago his firm, Advanced Technology Ventures, had its quarterly newsletter e-mailed by its public relations firm to thousands of entrepreneurs, venture capitalists and investors nationwide. When the newsletter e-mail arrived at Advanced Technology, it was slammed as spam by the company's filtering software.

"There's a trade-off when you fight spam," Baloff says. "This technology has a ways to go."

Then, too, many supposed solutions don't work. Roughly half of 64 companies recently polled by Sendmail said they tried anti-spam products at least twice unsuccessfully before finding the right product.

It took Morris Miller, managing director of Rackspace Managed Hosting, which oversees 9,000 Web servers worldwide, six attempts to corral spam. Software filters were ineffective. A free software program downloaded from the Internet wiped out 3,000 of his messages because it wasn't compatible with his company's e-mail server. Miller finally settled on technology requiring senders to verify their legitimacy.

Killing spam is "like playing whack-a-mole," Berkeley's Moss says.

**RELATED ADVERTISING LINKS**[What's this?](#)**Anti-spam Solutions**

Block 95% of spam w/low false positives. Enterprise solutions.

[www.eSafe.com](http://www.eSafe.com)

**Inbox full of spam?**

Try our easy anti-junk service and reclaim your inbox in 15 minutes

[www.messagefire.com](http://www.messagefire.com)

I GRADUATED IN:



1993

1983

1973

USATODAY.com partners: [USA Weekend](#) • [Sports Weekly](#) • [Education](#) • [Space.com](#)

[Home](#) • [News](#) • [Money](#) • [Sports](#) • [Life](#) • [Tech](#) • [Weather](#) • [Travel](#) • [Job Center](#)

Resources: [Mobile News](#) • [Site Map](#) • [FAQ](#) • [Feedback](#)  
[Email News](#) • [Jobs with Us](#) • [Terms of service](#) • [Privacy Policy](#) • [Media Kit](#)

© Copyright 2003 USA TODAY, a division of [Gannett Co. Inc.](#)



There's a new way to look at it.

THE  
XE

SEARCH

\_\_\_\_\_

**Economist.com**

**BUSINESS**

Friday November 7th 2003

EE denotes premium content | [Log in](#) | [Free re](#)

OPINION  
WORLD  
BUSINESS  
FINANCE & ECONOMICS  
SCIENCE & TECHNOLOGY  
PEOPLE  
BOOKS & ARTS  
MARKETS & DATA  
DIVERSIONS

CITIES GUIDE  
COUNTRY BRIEFINGS

**Economist Intelligence Unit**  
onlinestore

#### RESEARCH TOOLS

[Articles by subject](#)  
[Backgrounders](#)  
[Surveys](#)  
[Economics A-Z](#)  
[Style guide](#)  
[Business encyclopedia](#)

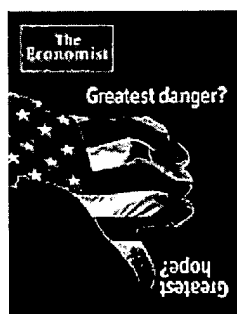
#### DATA BANK

[Currencies](#)  
[Big Mac index](#)  
[Weekly Indicators](#)

#### GLOBAL EXECUTIVE

[Executive Thinking](#)  
[Business Education](#)

#### PRINT EDITION



## Junk e-mail

### Stopping spam

Apr 24th 2003

From The Economist print edition

[Printab](#)

[E-mail](#)

**The volume of unwanted e-mail, or "spam", is soaring. But is there an acceptable way to block it?**

READING e-mails each morning used to be a relatively pleasant task for most at work or at home. Now it can be as delightful as sorting through the garbage of "prescription-free Viagra", penis-enlargement treatments, pornography, and get-rich-quick schemes are cascading across the internet, pouring billion unwanted messages—universally known as "spam"—into e-mail in-boxes. The volume of spam has soared recently, threatening to cripple e-mail, the "killer application" helped to popularise the internet and then became an essential tool for business everywhere.

Spam has suddenly become such a headache that pressure is growing for government action to stop it. Next week America's Federal Trade Commission will hold a public meeting of regulators, business leaders and consumer activists to discuss ways to stop spam. America Online (AOL) and Microsoft have even joined forces to push for legislation to combat it. Earlier this month AOL filed five lawsuits in Virginia, worth \$10m in damages against some of the biggest spammers.

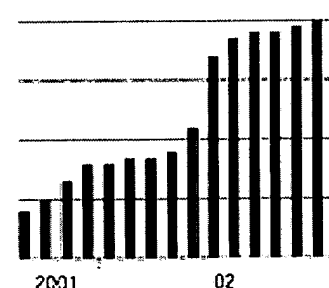
Unwanted bulk e-mail jumped by about 4% in March and now accounts for 45% of overall e-mail traffic, up from only 8% in September 2001, according to Brightmail, a firm that specialises in anti-spam filtering software. Brightmail has an obvious interest in highlighting the problem, but its estimates make sense. Most e-mail users can testify to spam's growth. Using software filters and tips from its own customers, AOL is now blocking an average of 780m junk e-mails daily, or about 100m more e-mails than it actually delivers.

### The cost of enlargement

Spam has become more than a nuisance. It is also costly. As well as the stories

#### You've got spam

Spam as % of total e-mail



Source: Brightmail



[Full contents](#)  
[Past issues](#)

#### SERVICES

[Free registration](#)  
[Web subscriptions](#)  
[Print subscriptions](#)  
[Academic offers](#)  
[Gift vouchers](#)  
[Mobile editions](#)  
[E-mail alerts](#)

#### CLASSIFIEDS

Business education,  
 recruitment, business  
 and personal: [click here](#)

#### ABOUT US

[Economist.com](#)  
[The Economist](#)  
[Global Agenda](#)  
[Contact us](#)  
[Media Directory](#)  
[Advertising info](#)  
[Job opportunities](#)

#### ADVERTISEMENT

transmission and computing costs imposed on internet service providers (ISP) is the cost of the time which millions of people spend sifting through and deleting unwanted messages. Ferris Research, a consulting firm, estimates that spam American organisations alone more than \$10 billion this year in lost productivity and extra spending to combat it. World-wide costs are much larger.

So far every attempt to curb spam has also imposed costs, in terms of lost productivity or added expense, which most people are not yet willing to pay. If spam continues to grow at such a rapid pace, however, that could change.

Why has spam taken off? The answer seems to be a matter of simple economics. Sending an e-mail incurs no direct cost. Even the cost of sending bulk e-mail is so small that a response rate as low as one in 100,000 justifies many bulk mailings (senders of physical junk mail usually need a response rate of one in 100). E-mail addresses on CDs sell for about \$5 per million, and spamming software can be downloaded free from the internet or purchased for just a few hundred dollars.

Spammers have used increasingly sophisticated techniques to get past software filters and to reach ever larger numbers of people. Some spam software scours the web, "scraping" anything that looks like an e-mail address from websites, news groups, chat rooms and subscriber lists. "Dictionary attacks" use software to generate huge lists of made-up e-mail addresses, mostly at big ISPs and web-based e-mail sites, and then spam them. Any message that does not bounce back as undeliverable has reached a real e-mail address.

Anti-spammers are pursuing both legal and technological remedies. So far, neither has done much to stem the rising tide. Anti-spam legislation of one sort or another has been enacted in 28 American states. Early in April two senators reintroduced anti-spam legislation that failed to pass Congress last year. The bill would impose criminal penalties on bulk e-mailers who disguise their identities or do not provide a genuine "unsubscribe" link to any message (many such links now merely invite more spam). The European Union has gone much further. Last July it passed a directive banning the sending of e-mail unless the recipient has specifically "opted in" to receive it. All EU countries have until October to pass national legislation implementing these severe new rules.

Despite all this legal effort, doubts remain about its effectiveness. Many spammers are difficult to locate and to prosecute. Many others run such small businesses that they are hardly worth suing. On the internet, they can easily operate across borders, making legal pursuit difficult or even impossible.

#### RELATED ITEMS

More articles about. . .

[The internet](#)

[Advertising](#)

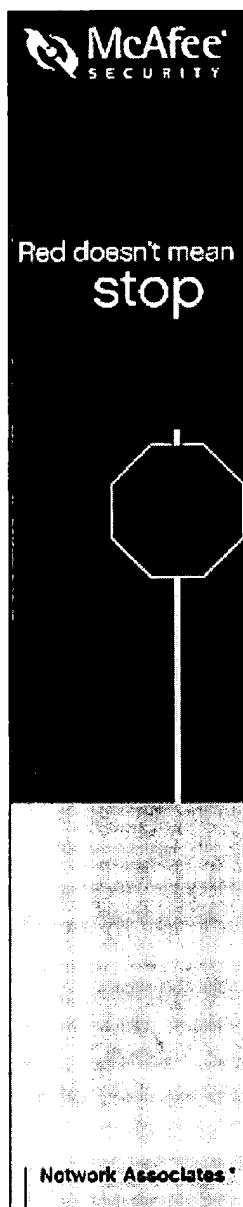
#### Websites

[Ferris Research](#) reports on the cost of spam. Also see the Federal Trade Commission's [report on spam](#), [commerce and the internet information](#) and [Brightmail](#).

#### ADVERTISEMENT

employment eligibility current  
 plan d tails enroll  
 employ claims employ e  
 current status provid r  
 nrollm nt employe  
 employ coverag plan d  
 provid r claims employ e  
 employ e ligibility curr nt  
 plan d tails enroll  
 employe claims employee c

**MetLife**  
 have you met



Moreover, the business community itself is divided about how restrictive laws be. Large direct-marketing firms which also send unsolicited e-mails would like an end to mass mailings by pornographers and other unsavoury types, but are appalled at the EU's scheme, fearing that it will destroy a promising new marketing and advertising medium. Legitimate businesses will be damaged, they say, while those pushing products will simply flout the law.

Others are trying to fight spammers with more sophisticated anti-spam filters: most such filters are based on "black lists" of senders' addresses to be blocked. These run on the computers of ISPs or the main servers of corporate networks; they fail to block many spammers, who can change their own addresses frequently and they produce too many "false positives", blocking genuine messages that the recipient wants.

The most reliable, though extreme, filtering approach is that offered by Microsoft Hotmail and other web-based e-mail services, which can be set to accept only from a specific "white list" of approved senders. But for most people this denies the joys of e-mail—receiving unanticipated messages—and takes more time than they want to devote to managing their e-mail. One start-up, IronPort, is offering a system which employs a white-list of firms who post a financial bond guaranteeing good behaviour.

One new idea is "challenge and response" filters which bounce messages back to the sender, asking for a confirmation before accepting the message. Some spammers have already countered this ploy with auto-response software. Another new idea is a filter that statistically analyses the content of incoming e-mails to find spam, but this is yet to be widely tested and may also be vulnerable to counter-measures by spammers.

There probably is no single solution to spam. Both technology and new laws are needed—although these might easily impose more costs than they remove. Most people will take a more active interest in managing their e-mail settings, or simply resign themselves to spending more time using the delete button.

## THE CRANFIELD MBA

[OPINION](#) | [WORLD](#) | [BUSINESS](#) | [FINANCE & ECONOMICS](#) | [SCIENCE & TECHNOLOGY](#)  
[PEOPLE](#) | [BOOKS & ARTS](#) | [MARKETS & DATA](#) | [DIVERSIONS](#) | [PRINT EDITION](#)

An Economist Group business

Copyright © The Economist Newspaper Limited 2003. All rights reserved.  
[Legal disclaimer](#) | [Privacy Policy](#) | [Terms & Conditions](#) | [Help](#)

**YAHOO! News**[News Home](#) - [Yahoo!](#) - [Help](#)**REUT**

**The Intel® Pentium® 4 Processor with HT Technology.**  
**Hyper-Threading Technology from Intel.** It lets  
 your PC run two tasks at once - at full throttle.  
 Get your game on. ▶ Visit [intel.com/go/ht](http://intel.com/go/ht)



Welcome, Guest

[Personalize News Home Page](#)**Yahoo! News** Fri, Nov 07, 2003Search  for  Search[News Home](#)[Top Stories](#)[U.S. National](#)[Business](#)[World](#)[Entertainment](#)[Sports](#)► [Technology](#)[Internet](#)[Personal Tech.](#)[Communications](#)[Software](#)[Enterprise](#)[Apple/Macintosh](#)[Linux/Open Source](#)[Most Popular](#)[Tech Tuesday](#)[Politics](#)[Science](#)[Health](#)[Oddly Enough](#)[Op/Ed](#)[Lifestyle](#)[Local](#)[Comics](#)[News Photos](#)[Most Popular](#)[Weather](#)[Audio/Video](#)[Full Coverage](#)[Crosswords](#)

Full Coverage

More about

[Spam & Junk Email](#)**Technology - Reuters****House Could Vote Soon on Senate Anti-Spam Bill**

Thu Oct 30, 2:45 PM ET

 Add [Technology - Reuters](#) to My Yahoo!*By Andy Sullivan*

WASHINGTON (Reuters) - The U.S. House of Representatives could vote as early as next week on a bill to outlaw e-mail "spam" that has already passed the Senate, congressional aides said on Thursday.

House leaders could take up the Senate bill to avoid choosing between two competing House bills that have effectively checkmated each other at the committee level, the aides said.

As the volume of get-rich-quick schemes, body-enhancement offers and other unwanted spam has grown to account for more than half of all e-mail traffic, pressure has increased on Congress to outlaw much of the unsolicited commercial e-mail.

The Senate passed an anti-spam measure by a vote of 97-0 last week, but similar legislation in the House has been stalled at the committee level.

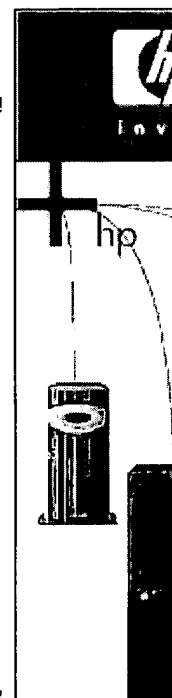
Leaders of the House Energy and Commerce and Judiciary committees introduced an anti-spam bill earlier this year, but many rank-and-file members support a tougher bill introduced by New Mexico Republican Rep. Heather Wilson.

The two sides have made no progress since July and passage of either House bill is seen as unlikely this year.

Energy and Commerce Committee Chairman Billy Tauzin could bypass the logjam by taking up the Senate bill and bring it directly to the House floor without a committee vote, several aides said.

"It's an option that's being discussed, but no final decisions have been made," Tauzin spokesman Ken Johnson said.

A spokesman for House Speaker Dennis Hastert similarly said that



Click on a server

**HP TC:**

- Up to 5 users
- Intel® Celeron® 2.20GHz
- » [Learn more](#)

**Tech Education**

- [Online Degrees](#)

## Related News Stories

- [FTC Slams Pop-Up Spammer](#) Ziff Davis/Yahoo! News (Nov 6, 2003)
- [Obscure Windows Feature Lets in Pop-Up Ads - FTC](#) Reuters (Nov 6, 2003)
- [US regulators target "pop-up spam" scheme using Windows loophole](#) AFP (Nov 6, 2003)

## Opinion & Editorials

- [Lose weight, grow hair, can spam](#) St. Petersburg Times (Nov 3, 2003)
- [Congressional Spam Filter](#) NY Times (registration req'd) (Nov 3, 2003)

## Feature Articles

- [Spam Slayer: Beware Spam's Siblings](#) PC World/Yahoo! News (Nov 3, 2003)
- [E-Mail Providers Devising Ways to Stop Spam](#) Washington Post (Oct 30, 2003)

## Related Web Sites

- [Coalition Against Unsolicited Commercial Email](#)
- [Spamhaus Project](#)
- [Spam Laws](#)

## News Resources

### Providers

- [Reuters](#)
- [AP](#)
- [washingtonpost.com](#)
- [USA TODAY](#)
- [NewsFactor](#)
- [PC World](#)
- [AFP](#)

House leaders are considering the approach but have not yet made any decisions.

Both House bills show many similarities to the Senate's Can Spam Act, which was sponsored by Montana Republican Sen. Conrad Burns and Oregon Democratic Sen. Ron Wyden.

Businesses would be free to send unsolicited e-mail to Internet users, but would have to identify themselves clearly and honor requests to be taken off their mailing lists. Violators would face fines and jail time.

But the bill could face opposition from dozens of supporters of Wilson's bill, who favor a broader definition of spam and more latitude for state prosecutors to pursue spammers.

"She still has concerns about enforcement and the definition of commercial e-mail that is contained in the Can Spam Act, and so at this point she thinks those are things that we have to continue to address," a Wilson spokesman said.

 [Email Story](#)

 [Post/Read Msgs \(2082\)](#)

 [Print Story](#)

**Ratings:** Would you recommend this story?

Not at all **1 - 2 - 3 - 4 - 5** Highly  
Avg Rating: 4.14, 14 votes

---

Next Story: [Apple: iTunes Outsold Napster 5-1 in 1st Week](#) (Reuters)

More [Technology](#) - [Top Stories](#) [Stories](#)

- [Site Uses Web to Make Real-Life Meetings](#) (AP)
- [Music Firms Compose \\$5 Billion Symphony](#) (washingtonpost.com)
- [Research rides a fly to a 'quantum leap forward'](#) (USATODAY.com)
- [Patch Issued for Latest Microsoft Office Software](#) (NewsFactor)
- [Compact Flash Card Hits a Higher Speed](#) (PC World)

## Weekly Specials

ADVERTISEMENT

- [Lose 10lbs in 5 weeks with Atkins. Click here.](#)
- [SAVE up to 70% on Life Insurance! Protect YOUR family today.](#)
- [REFINANCE NOW! RATES ARE RISING! Free Quote.](#)
- [Free online Mortgage Refinance Quote @ Service 1 Mortgage](#)
- [Buy stocks for just \\$4. No Minimums Required.](#)
- [STOP CREDITOR HARASSMENT! Become DEBT FREE!](#)
- [Buy Ink Cartridges & Refill Kits at MyInks - Save 80%](#)
- [Buy Ink Cartridges & Refill Kits at MyInks](#)
- [Get an ONLINE DEGREE! Get your DREAM JOB](#)
- [Get an MBA in as little as 8 months! FREE Info!](#)

- [SiliconValley.com](#)
- [TechTarget](#)
- [Ziff Davis](#)
- [TechWeb](#)
- [CP](#)

**Services**

- [Daily Emails](#)
- [Free News Alerts](#)

**XML** News via RSS

---

Copyright © 2003 Reuters Limited. All rights reserved. Republication or redistribution of Reuters content is expressly prohibited without the consent of Reuters. Reuters shall not be liable for any errors or delays in the content, or for any actions taken in reliance thereon.

Copyright © 2003 Yahoo! Inc. All rights reserved.

[Questions or Comments](#)

[Privacy Policy](#) - [Terms of Service](#) - [Copyright Policy](#) - [Ad Feedback](#)



Not Just Protection,  
but Business Enablement  
eTrust. Security Management Software.



Computer Associates



CMP  
United Business Media

**INTERNETWEEK.com**  
TECHNOLOGY THAT CONNECTS THE ENTERPRISE

Part of the

**TechWeb**

BUSINESS  
Technology Network

**BREAKING NEWS | E-BUSINESS | APPLICATION DEVELOPMENT | SECURITY | OPEN SOURCE | ALL STORIES**

Enter term(s)

☒ InternetWeek

☐ TechWeb

Search

Advanced Search

Updated Friday, August 1, 2003, 6:00 AM EDT

## NEWS

### Viruses Are Riding On Spam, MessageLabs Says

By InternetWeek.com

Techniques used by spammers to send unwanted advertising to people's e-mail boxes are also being used to send viruses that are often being altered and re-sent to fool anti-virus software, an e-mail security company said Thursday.

The trend identified by MessageLabs is part of the ongoing convergence between viruses and spam. Officials with the New York-based company said spam messages containing backdoor-trojan attachments are being sent in large volumes. The attached trojans are being altered and redeployed, almost on a daily basis, to outsmart signature-based, anti-virus software.

"In the past, backdoor-trojans were typically sent by virus makers and distributed through some of the sophisticated mass-mailing techniques contained within viruses themselves," Mark Sunner, chief technology officer of MessageLabs, said in a statement. "Recently, we have started tracking a growing convergence between the techniques of the virus makers and spammers. It is becoming clear that spammers are now adopting aggressive, determined techniques to sustain their ability to spam and outsmart some of the outdated solutions being used to fight them."

Once they have entered a company's network, the backdoor-trojans can be used maliciously in many ways. In particular, they can be used to create an "open-proxy" whereby the compromised computer can be used to surreptitiously send millions of new spam messages, MessageLabs said.

Companies' most vulnerable attacks are those that rely upon signature-based, anti-virus software, which has to be updated constantly across a new in order to keep pace with the deluge of new variants of these spam-based trojans.

MessageLabs also said that in July, it stopped 79.7 million spam messages, or 1 out of every 2 e-mails sent by its

## BREAKING NEWS

[Trend Micro, Netscreen  
Team Up On  
Firewall/VPN Appliance](#)

[Cisco-Sprint VPN  
Partnership Targets  
Dealers](#)

[FCC To Consider New  
Regulations On VoIP  
Services](#)

[WPA Security Breach  
Discussed During  
Ratification](#)

[Microsoft Settles With  
North Carolina For \\$89  
Million](#)

[More Vulnerabilities For  
Internet Explorer](#)

[FTC Gets Tough With  
Spammers & Windows  
Messenger](#)

[Microsoft Offers XP  
Wireless Security Rollup](#)

## FREE Newsletter

Get the latest Internet news every day with the InternetWeek NewsBreak e-mail newsletter. Tell me more Sign me up

## Focal Points

(sponsored links)

- Enterprise Search
- Identity Management
- IT Training
- Network Security
- Routers & Switches
- VOIP
- Windows Server 2003
- Web Hosting

## Resources

Home  
Features  
About InternetWeek.com  
Contact Us  
E-Mail Newsletter  
Tech Library  
TechCareers  
Privacy Statement

## Resource Centers

Virtual Private Networks (VPNs)

## TechWeb Sites

InformationWeek  
InternetWeek  
Network Computing  
Network Magazine  
Financial Technology



InternetWeek.com

Co

Sec

Network  
Bank Systems &  
Technology  
Insurance & Technology  
Wall Street & Technology  
Technology & Learning  
Optimize Magazine  
The Open Enterprise

Ad Info

corporate customers. That number was 10 million more than the total number of spam messages stopped in all of 2002 by the company.

#### Related Links

- [Mailblocks Adds To Challenge/Response Features](#)
- [Americans Getting Used To Spam](#)



[Printable Version](#)



[Email the Article](#)

[Home](#) | [Breaking News](#) | [E-Business](#) | [Application Development](#)

[Security](#) | [Open Source](#) | [All Stories](#)



Not Just Protection,  
but Business Enablement  
eTrust. Security Management Software.



Computer Associates\*

[Media Kit](#) | [Copyright © 2003](#) | [CMP Media LLC](#) | [Privacy Statement](#) | [Feedback](#)

Cus  
Ar  
Spo

- [Down netwc Comr Paper](#)
- [Down Busin series](#)
- [Execi strate Execi](#)
- [Get s: collat Webc](#)

Cus  
C





11-12-03

PATENT  
Attorney Docket No.: 1948/US/2  
Express Mail Label No.: EV 304 884 764 US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Inventor: John R. KLUG

Application No.: 10/673,107

Filed: September 27, 2003

For: METHOD AND APPARATUS FOR  
IDENTIFYING, MANAGING, AND  
CONTROLLING COMMUNICATIONS

Confirmation No.: Not Yet Assigned

Examiner: Not Yet Assigned

Art Unit: Not Yet Assigned

**CERTIFICATE OF MAILING BY EXPRESS MAIL**

Mail Stop Petitions  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

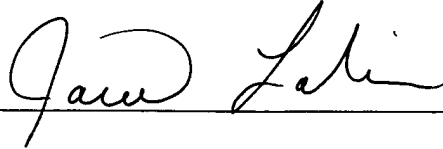
Sir:

The undersigned hereby certifies that the following documents:

1. Petition to Make Special (8 pages)(4 exhibits);
2. Copies of ten cited references;
3. Check for \$130.00;
4. Certificate of Mailing by Express Mail; and
5. Return Card,

relating to the above application, were deposited as "Express Mail," Mailing Label No. EV 304 884 764 US with the United States Postal Service, addressed to Mail Stop Petitions, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 10 day of November, 2003.

Date: 11/10, 2003

  
\_\_\_\_\_  
Mailer  
Dorsey & Whitney LLP